

REMARKS/ARGUMENTS

Reconsideration of this application is requested. This Amendment accompanies a Request for Continued Examination and addresses issues raised in the Final Rejection of December 3, 2008. It also incorporates a response to the Interview Summary dated January 15, 2009.

The claims have been amended in order to more particularly point out and distinctly claim that which applicants regard as their invention and to further distinguish the claims from the cited prior art. Claim 19 is amended in step 1) to describe the dispersing process as forming a polyol domain in the microcapsule in order to stabilize the enzyme. Basis for this terminology may be found on page 8 of the description.

Two new claims, 20 and 21, have been added. Claim 20 is similar to previous claim 19 but it states that the dispersing forms spherical dispersoids in which only the external layer of the enzyme partially dissolves therein to form an enzyme/polyol mixture phase dispersed in solution in order to disperse and protect and stabilize the enzyme. Basis for this appears on page 9 of the description of the invention. New claim 21 corresponds to claim 12 but is dependent on new claim 20.

The amendments to the claims were discussed with the examiner during the interview on January 13, 2009 and in addition to further defining the invention serve to further distinguish the claims from the cited prior art.

Claims 1-9, 12, 13 and 17-21 are pending in the application and of these claims 12 and 19-21 are directed to elected subject matter.

The sole issue raised in the outstanding Official Action is the patentability of claims 9-12 over Mathiowitz in view of Asgharian. The U.S. patent to Asgharian discloses the use of polyols to aid in the stabilization of enzymes. As applicants pointed out in their previous response, while it is true that polyols are used, the same reference also *requires* that the polyol be used in combination with a specified “aromatic acid derivative”; *see* column 4, lines 9-12.

The examiner notes applicants’ point of argument and on page 4, item 12 of the Official Action of December 3, 2008, second sentence, she states “In response (to applicants’ previous argument) it is noted that the claims do not exclude the presence of other components to stabilize the enzyme”. The examiner is not correctly interpreting the claims.

Claim 19 is clear that the only component present in step (1) to disperse the enzyme is a low molecular weight polyol – the listing of materials does not include “comprising” or other “open” language that would allow for the presence of other materials. Claim 19 is amended and claim 20 added with the examiner’s comments in mind.

Claims 19 and 20 now emphasize that only the polyol is present in step (1) and that the claim does not allow for the presence of other materials such as the aromatic acid derivatives required by the reference.

Attached is a microscopic picture of the enzyme dispersed into a low molecular weight polyol, thus forming enzyme/polyol mixture phase. As seen in the picture, the unstable enzyme is enveloped in the low molecular weight polyol, thus the enzyme can be stabilized.



For the above reasons it is respectfully submitted that claims 12 and 19-21 define subject matter that is patentable and that the current rejection should be withdrawn. Should the examiner require further information, please contact the undersigned.

The above comments confirm the substance of the interview with the examiner on January 13, 2009 as required by MPEP §713.04.

JU et al.
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Respectfully submitted,

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